

CLAIM AMENDMENTS

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Claims 1-15 (Cancelled)

16. (New) A method comprising:  
providing wavelet coefficients that indicate an image, each wavelet coefficient represented by ordered bits so that each bit representing the coefficient is associated with a bit order; and  
for each said bit order, coding the associated bits to indicate zerotree roots that are associated with said bit order.
17. (New) The method of claim 16, wherein each bit of each coefficient is associated with a different bit order.
18. (New) The method of claim 16, wherein the act of coding the bits comprises:  
determining which of the bits indicate zeros; and  
classifying each zero as either an isolated zero or a zerotree root.
19. (New) The method of claim 18, wherein some of the wavelet coefficients are descendants of some of the other wavelet coefficients, and wherein the act of determining comprises:  
traversing a descendant tree from a bit associated with one of said some of the wavelet coefficients to bits associated with said other wavelet coefficients to locate the zerotree roots.
20. (New) The method of claim 16, wherein the act of providing comprises:  
producing different levels of the code, each level being associated with a different resolution of the image.
21. (New) The method of claim 20, wherein the levels that are associated with lower resolution are associated with higher orders.

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22. (New) The method of claim 16, wherein the act of providing wavelet coefficients comprises:

providing intensity level coefficients that indicate pixel intensities of the image; and transforming the intensity level coefficients into wavelet subbands.

23. (New) An article comprising a storage medium readable by a processor-based system, the storage medium storing instructions to cause a processor to:

provide wavelet coefficients that indicate an image, wherein each bit of each coefficient is associated with a different bit order; and

for each said bit order, code the associated bits to indicate zerotree roots that are associated with said bit order.

24. (New) The article of claim 23, wherein each bit of each coefficient is associated with a different bit order.

25. (New) The article of claim 23, the storage medium comprising instructions to cause the processor to:

determine which of the bits indicate zeros, and

classify each zero as either an isolated zero or a zerotree root.

26. (New) The article of claim 25, wherein some of the wavelet coefficients are descendants of some of the other wavelet coefficients, the storage medium comprising instruction to cause the processor to:

traverse a descendant tree from a bit associated with one of said some of the wavelet coefficients to bits associated with said other wavelet coefficients to locate the zerotree roots.

27. (New) The article of claim 23, the storage medium comprising instructions to cause the processor to:

produce different levels of the code, each level being associated with a different resolution of the image.

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28. (New) The article of claim 27, wherein the levels that are associated with lower resolutions are associated with higher orders.

29. (New) A computer system comprising:  
a processor; and  
a memory storing a program to cause the processor to:  
provide wavelet coefficients that indicate an image, each wavelet coefficient represented by ordered bits so that each bit representing the coefficient is associated with a bit order; and  
for each said bit order, code the associated bits to indicate zerotree roots that are associated with said bit order.

30. (New) The computer system of claim 29, wherein each bit of each coefficient is associated with a different bit order.

31. (New) The computer system of claim 29, wherein the program causes the processor to code the bits by determining which of the bits indicate zeros and classifying each zero as either an isolated zero or a zerotree root.

32. (New) The computer system of claim 31, wherein some of the wavelet coefficients are descendants of some of the other wavelet coefficients, and wherein the processor determines which of the bits are zeros by traversing a descendant tree from a bit associated with one of said some of the wavelet coefficients to bits associated with said other wavelet coefficients to locate the zerotree root.

33. (New) The computer system of claim 29, wherein the program causes the processor to provide the wavelet coefficients by producing different levels of the code, each level being associated with a different resolution of the image.